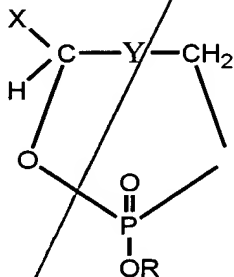


AMENDMENTS TO THE CLAIM

1. (original) A method for inducing promotion of neural cell differentiation of target cells comprising contacting said target cells for a suitable period of time with an effective amount of a compound of the general Formula I



wherein

Y is  $-(CH_2)_m-$ ,  $-CH(OH)-$  or  $-C(=O)-$  and m is 0-3;

X is H, alkyl,  $-CH_2OH-$ ,  $CH_2Oacyl$  or  $-CH_2acyl$ ; and

R is H, a cation, alkyl or optionally substituted aryl;

provided that when Y is  $-(CH_2)_m-$ ,  $m=0$ , and R is H or cation, X is not  $CH_2Oacyl$ .

2. (original) A method for promoting neural activity in an individual comprising administering to the individual in need an effective amount of a compound of the general Formula I of Claim 1.

3. (currently amended) A method according to Claim 2, wherein said neural activity is selected from the group consisting of promotion of neuronal outgrowth, promotion of nerve growth, provision of dopaminotrophic supporting environment in a diseased portion of the brain, ~~prevention of nerve degeneration~~ and nerve rescue.

C1  
4. (currently amended) A method for the ~~prevention or treatment~~ of disorders and diseases which can be ~~prevented or treated~~ by promoting neural cell differentiation and/or neural activity comprising administering to a person in need a therapeutically effective amount of a compound of Formula I of Claim 1.

5. (currently amended) A method according to Claim 4, wherein said disorders and diseases are mental disorders or diseases which are at least one of ~~selected from the group consisting of dementia~~ mental disorders and neuro-degenerative disorders or diseases.

54  
6. (currently amended) A method according to Claim 54, wherein said mental disorder or disease is schizophrenia or dementia.

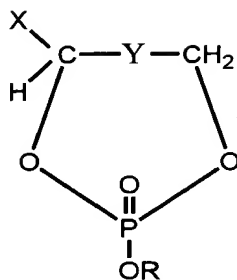
7. (original) A method according to Claim 4, wherein said disorders and diseases are neurodegenerative disorders or diseases.

Sub  
D1  
8. (currently amended) A method according to claim 1 wherein the compound of formula I is selected from the group consisting of

- C2
- i. 1,3 cyclic glycerophosphate-~~1,3-eGP~~;
  - ii. 1,2 cyclic glycerophosphate-~~1,2-eGP~~;
  - iii. phenyl 1,3 cyclic glycerophosphate-~~P-1,3-eGP~~;
  - iv. phenyl 1,2 cyclic glycerophosphate-~~P-1,2-eGP~~;
  - v. 1,3 cyclic propanediol phosphate-~~1,3-ePP~~;
  - vi. 1,2 cyclic propanediol phosphate-~~1,2-ePP~~;
  - vii. phenyl 1,3 cyclic propanediol phosphate-~~P-1,3-ePP~~;
  - viii. phenyl 1,2 cyclic propanediol phosphate-~~P-1,2-ePP~~;
  - ix. cyclic dihydroxyacetone phosphate-~~eDHAP~~; and
  - x. phenyl cyclic dihydroxyacetone phosphate-~~P-eDHAP~~.

9-16. (canceled)

Sub  
C3  
17. (currently amended) A method for promoting neural activity in an individual comprising administering to the individual in need an effective amount of a compound of the general formula I



wherein

Y is  $-(CH_2)_m-$ ,  $-CH(OH)-$  or  $-C(=O)-$  and m is 0-3;

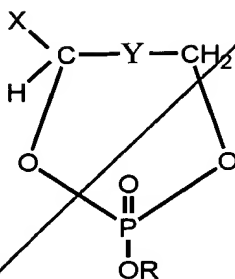
X is H, alkyl,  $-CH_2OH-$ ,  $CH_2Oacyl$  or  $-CH_2acyl$ ; and

R is H, a cation, alkyl or optionally substituted aryl;

provided that when Y is  $-(CH_2)_m-$ , m=0, and R is H or cation, X is not  $CH_2Oacyl$ ;

wherein said neuronal activity is selected from the group consisting of promotion of neuronal outgrowth, promotion of nerve growth, provision of dopaminotrophic supporting environment in a diseased portion of the brain, ~~prevention of nerve degeneration condition other than dementia~~ and nerve rescue.

18. (currently amended) A method for the ~~prevention or treatment~~ of disorders and diseases, other than dementia, which can be ~~prevented or treated~~ by promoting neural cell differentiation and/or neural activity, the method comprising administering to a person in need a therapeutically effective amount of a compound of Formula I ~~of Claim 9~~



wherein

Y is  $-(\text{CH}_2)_m-$ ,  $-\text{CH}(\text{OH})-$  or  $-\text{C}(=\text{O})-$ , and m is 0-3;

X is H, alkyl,  $-\text{CH}_2\text{OH}-$ ,  $\text{CH}_2\text{Oacyl}$  or  $-\text{CH}_2\text{acyl}$ ; and

R is H, a cation, alkyl or optionally substituted aryl;

provided that when Y is  $-(\text{CH}_2)_m-$ ,  $m=0$ , and R is H or cation, X

is not  $\text{CH}_2\text{Oacyl}$ .

19. (original) A method according to claim 18, wherein said disorders and diseases are mental disorders or diseases.

C4  
20. (currently amended) A method according to claim 18-19, wherein said mental disorder or disease is schizophrenia.

21. (currently amended) A method according to Claim 18-19, wherein said mental disorder is a learning disability.

22. (original) A method according to claim 18, wherein said disorders and diseases are neurodegenerative disorders or diseases.

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23. (currently amended) A method according to Claim ~~22~~ 18, wherein said neurodegenerative disorder or disease is Alzheimer's disease or Parkinson's disease.

24. (currently amended) A method according to Claim ~~17~~ 18, wherein said disorders or diseases result from exposure of an individual to harmful environmental factors or from a mechanical injury.

25. (currently amended) A method according to Claim ~~17~~ 18, for the treatment of nerve rescue after nerve injury.

26. (currently amended) A method according to claim ~~17~~ 18 where the general formula I is selected from the group consisting of

- i. 1,3 cyclic glycerophosphate-~~1,3~~-eGP;
- ii. 1,2 cyclic glycerophosphate-~~1,2~~-eGP;
- iii. phenyl 1,3 cyclic glycerophosphate-P-~~1,3~~-eGP;
- iv. phenyl 1,2 cyclic glycerophosphate-P-~~1,2~~-eGP;
- v. 1,3 cyclic propanediol phosphate-~~1,3~~-ePP;
- vi. 1,2 cyclic propanediol phosphate-~~1,2~~-ePP;

- Handwritten: 5*
- vii. phenyl 1,3 cyclic propanediol phosphate-P-1,3-ePP;
  - viii. phenyl 1,2 cyclic propanediol phosphate-P-1,2-ePP;
  - ix. cyclic dihydroxyacetone phosphate-eDHAP; and
  - x. phenyl cyclic dihydroxyacetone phosphate-P-eDHAP.
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27-36. (canceled)